



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/988,527

11/20/2001

Jean-Pierre Mao

034299-364

8860

7590

10/10/2007

Robert E. Krebs
THELEN REID & PRIEST
PO BOX 640640
SAN JOSE, CA 95164-0640

EXAMINER

SEFCHECK, GREGORY B

ART UNIT

PAPER NUMBER

2619

MAIL DATE

DELIVERY MODE

10/10/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/988,527

Applicant(s)

MAO, JEAN-PIERRE

Examiner

Gregory B. Sefcheck

Art Unit

2619

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 August 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

- Applicant's Amendment filed 8/10/2007 is acknowledged.
- Claim 1 has been amended. The previous objection to claim 1 is withdrawn.
- Claims 1-3 remain pending.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robins et al. (US006430184B1), hereafter Robins.

- In regards to Claims 1 and 2,

Robins discloses a process and device for communicating data packet flows, including Asynchronous Transfer Mode (ATM; Abstract; Col. 1, line 27; claim 1,2 – process/device for deterministic transmission of asynchronous data in packets).

Referring to Figs. 1 and 2, data is received from the Quad PHY 1 physical interface at MOM 1 chip 10 (input module) and then stored in one of a plurality of FIFOs managed by Queue Manager 30 (QM; packeting module; Col. 5-6, lines 43-23; Col. 14, lines 15-28; claim 1,2 – receiving data at input module and storing in FIFOs connected to one or more packeting modules).

Robins further discloses Forwarding Engine 40 that provides instructions to the QM for packeting based upon received headers, which are added to the packets before transmitting them out so they may be recovered in their predefined order (sorting and enhancement data; Col. 7, lines 8-13; Col. 8, lines 8-57; claim 1,2 – packeting data from FIFOs in a first set of packets in a first packeting cycle according to a predetermined order with sorting and enhancement data; claim 1,2 – recovering one after another of the first packets, in a predefined order, to form a first message; claim 1 - allowing synchronization of start and end of packets in relation to their transmission in the output message).

Robins discloses a “cut-through” mode of operation in which packeting is ended and the data is transmitted before a complete packet is realized, such that portions of a packet may be transmitted while other portions are still being received (Col. 17, lines 25-45; Col 16, lines 17-64; claim 1,2 – ending packeting cycle; claim 1,2 – forwarding first packets regardless of state of completion of first packeting cycle; claim 1,2 – beginning start of second packeting cycle).

Robins shows that packets are then sent out another port on a Quad PHY 2 (Fig. 1; claim 1,2 – setting/outputting of the message in the electrical format of the protocol used for transmission).

Robins does not explicitly show the "cut-through" mode of operation comprising a request from the message composition module.

However, Robins does disclose that the Forwarding Engine 40 is responsible for providing instructions to the QM and MOM for packeting according to the linked-lists of packet descriptors stored in buffers of the QM. Therefore, the instruction (request) to perform packeting in accordance with "cut-through" mode would come from the Forwarding Engine 40 (message composition module; Col. 7, lines 8-13; claim 1,2 – ending packeting cycle at the request of a message composition module).

It would have been obvious to one of ordinary skill in the art at the time of the invention to initialize "cut-through" mode in the process and device of Robins through an instruction; or request, from the Forwarding Engine 40. One of ordinary skill in the art would be motivated to do this because the Forwarding Engine 40 is already shown to provide instructions to the QM and MOM for packeting in a standard mode of operation, so any change to the mode of operation should be initiated from Forwarding Engine 40.

Art Unit: 2619

3. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Robins in view of Troxel et al. (US006014381A), hereafter Troxel.

- In regards to Claim 3,

Robins discloses a process and device for communicating data packet flows that covers all limitations of the parent claim.

Robins does not explicitly disclose the use of the process in data acquisition and real-time processing systems for test installation of new airplanes.

The use of the packetization process shown by Robins would be beneficial for data acquisition and real-time processing systems of any type, including those used on airplanes as shown by Troxel (Col. 1; claim 3 – use of claim 1 process in data acquisition and real-time processing systems for test installation of new airplanes).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the process of Robins in data acquisition and real-time processing systems, including those used in airplanes, as shown by Troxel, so that portions of data packets can be transmitted while other portions of the packets are still being processed.

Response to Arguments

4. Applicant's arguments filed 8/10/2007 have been fully considered but they are not persuasive.

- In the Remarks on pg. 4 of the Amendment, Applicant contends that Robins does not disclose the limitations "after sending of a request by a message composition module, ending said first packing cycle in packeting modules" or "a message composition module receiving....is completed" as in claims 1 and 2, respectively. Applicant alleges that these limitations are not met by Robins because the MII disclosed by Robins in Figs. 1 and 2 does not read on the "message composition module", as claimed. Applicant further argues that the packets disclosed by Robins do not meet the claimed "message", since Applicant defines a message as successive packets in a predefined order.
- The Examiner respectfully disagrees. As shown in the above rejections, it is admitted that Robins does not explicitly disclose a message composition module. The rejection goes on to show that the Forwarding Engine 40 disclosed by Robins acts as a message composition module in that the Forwarding Engine 40 instructs (requests) processing in "cut-through" mode, which is disclosed by Robins to enable transmission of portions of a packet while other portions are still being received, thereby meeting the contested claim limitations. Further, Robins discloses a packet is made of successive order of cells. Therefore, Robins' "packet" meets the claimed "message".

- In the Remarks on pg. 5 of the Amendment, Applicant contends that claim rejections based upon the disclosure of Robins are improper because Robins pertains to solving a different problem than the stated purpose of Applicant's disclosure.
- The Examiner respectfully disagrees. Robins is not required to explicitly pertain to solving the same technical problems as the present application in order to disclose the claimed limitations. Furthermore, while it is admitted the Robins pertains to resolving the problems cited by Applicant and that those problems differ from those contemplated by the Applicant, Robins nonetheless discloses the explicit limitations claimed by Applicant.

Therefore, the rejections are proper.
- In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., message can contain no data, the solving of specified technical problems, etc.) on pg. 5 of the Remarks are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).


Art Unit: 2619

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory B. Sefcheck whose telephone number is 571-272-3098. The examiner can normally be reached on Monday-Friday, 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing Chan can be reached on 571-272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Gregory Sefcheck
Patent Examiner
10-3-2007